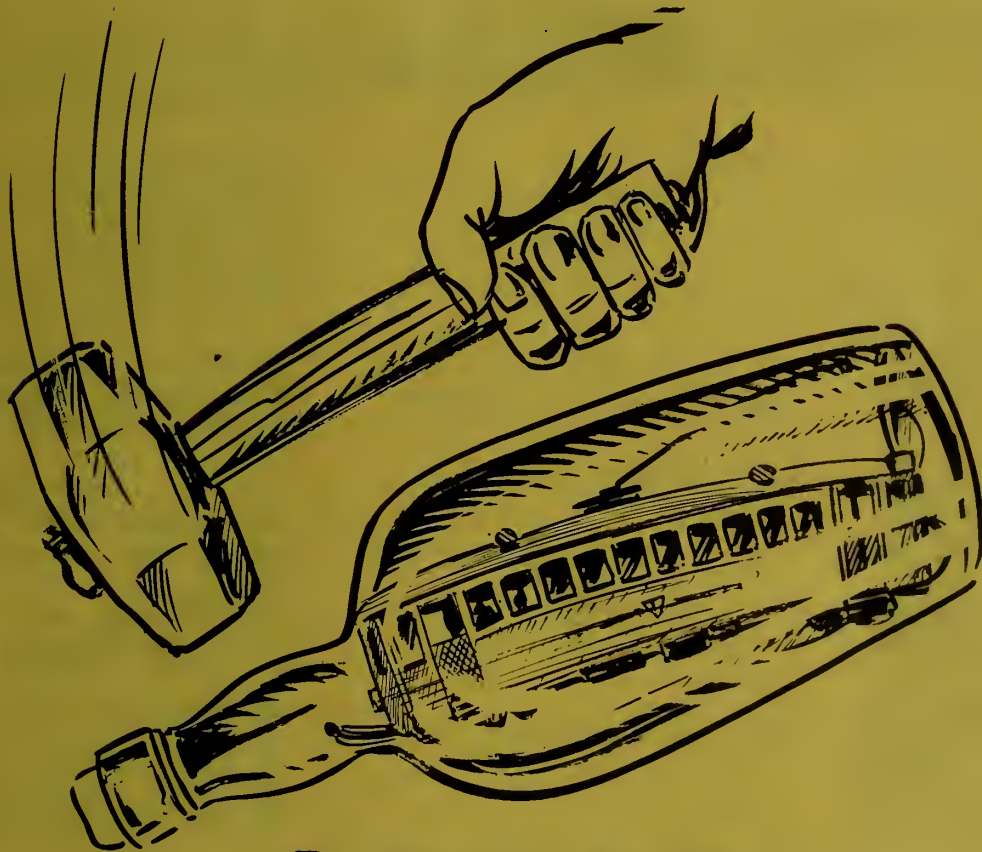


WAR EMERGENCY UNIFIED
PUBLIC TRANSPORTATION SYSTEM

for

SAN FRANCISCO

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BREAK
the **MARKET ST.**
BOTTLENECK

A Project of the
SAN FRANCISCO JUNIOR CHAMBER OF COMMERCE

Developed by the
CITY PLANNING COMMITTEE

JUNE 1944

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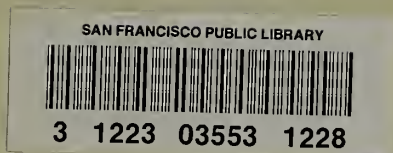


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FOREWORD

It has already been said by the San Francisco Chamber of Commerce that concerning public transit, the basic interests of the people of San Francisco require:

- 1st - A universal transfer at a fair price.
- 2nd - As much speed and as little delay as possible with available equipment.
- 3rd - Frequent and regular, dependable service.
- 4th - Room enough for everyone who wants to ride.

The Public Utilities Commission has subscribed to the first, a universal transfer at a fair price, in the unification of our major transit systems.

We know that it is the Commission's desire to underwrite the other advantages as well, and that the Commission will do so as soon as it can be sure of a satisfactory method that is feasible.

We of the San Francisco Junior Chamber of Commerce now offer a plan whereby all of the above four points will be achieved.

The City Planning Committee of the Junior Chamber of Commerce has devoted seven months of intensive study and research to the development of this public transit solution in a sincere effort to materially aid the war effort at this focal point on the Pacific Coast.

INDEX

It has already been said by the various members of Congress that emergency public transportation is the main objective of the program in the President's message.

- 1 - 1. Emergency transportation in the future
- 2 - 2. The need for a national public transportation system
- 3 - 3. The need for a national public transportation system
- 4 - 4. The need for a national public transportation system
- 5 - 5. The need for a national public transportation system

D REF 388.41 W195

War emergency unified
public transportation
1944.

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WAR EMERGENCY PLAN FOR UNIFIED OPERATION
OF
MUNICIPAL AND MARKET STREET RAILWAY SYSTEMS NOW

OBJECTIVES

1. 25% faster service
2. Reduce the crowded condition of cars and buses.
3. Less delay in waiting for the right car.
4. Eliminate Market Street double track loading hazard.
5. Raise property values.
6. A minimum of time and expense required to change over.
7. Utilize existing equipment to better advantage.
8. Better service to new areas
9. No new buses needed --- save gasoline
10. Assist the war effort.

METHODS

1. Create street car loop systems.
2. Use express and local cars.
3. Extend one-way street system.
4. Create a Market Street shuttle service.
5. Add to outlying feeder routes.
6. Make full utilization of existing trackage and routes.

The METHODS are explained in the accompanying charts and diagrammatic maps, and need no further explanation here. The OBJECTIVES, however, are accomplished as follows:

1. 25% Faster Service

This applies specifically to the express system as compared to local traffic. It applies only off of Market Street, and does not take into consideration time savings possible there, but not now measurable. The actual saving in time, calculated from charted figures is more than 25% in stopping time, but some of this time is lost in handling more people at the express stops; so 25% was selected as an estimated fair, average figure to express the expected saving of time.

2. Reduce the crowded condition of cars and buses.

With the Emergency Plan in operation, the Unified System will be able to carry 25% more passengers in the same length of time. With this increased ability to handle peak traffic loads, crowding will be reduced to just the extent of the increase in capacity. This, in turn, means more seats and more room.

3. Less delay in waiting for the right car.

If you are going home from down town, you will take the first car that comes along. It will go the length of Market Street and back, but you will transfer at the place your usual car turns off Market Street, and your car will be waiting there for you and will leave on schedule. Those who do not

take their cars on Market Street will take their usual cars on the Mission- Folsom Loop and go home by express. The cross-town cars and buses also have increased service, particularly in the area between Broadway and Townsend Street, with connections waiting at transfer points. This will save you from standing in the rain on a windy street corner wondering what happened to your car.

4. Eliminate Market Street Double Track Loading Hazard.

The Emergency Plan gets rid of this danger to the greatest extent by using only the middle tracks on Market Street for the shuttle system up to Van Ness Avenue. West of Van Ness Avenue the Shuttle service will use the outside tracks while the inside tracks will be used by "K" and "L" express service. Outer track on North Side of Market and East of Van Ness Avenue will be used only at places necessary to complete loops.

5. Raise Property Values.

The values of the transfer points from the Market Street shuttle to the loop systems will increase, because people tend to make small purchases at such points when they are assured that they will not have to wait an indefinite time for the next car. The outlying districts being better served by public transportation will build up more quickly with faster service to residents of those areas.

6. A Minimum of Time and Expense required to Change Over.

Since it is intended under the Emergency Plan to change only routings and type of operation and not to make major changes in or purchase of new equipment, the only expense involved is in the installation of a small amount of connecting track and some curves and switches. The job can be done in 30 days and the cost is less than a dozen new buses.

7. Utilize Existing Equipment to Better Advantage.

This is no secret to the present operators of the lines: better utilization of the equipment was not possible under the conditions prevailing before unification. Now that we have this advantage, the Emergency Plan can give about 25% better service with the same equipment.

8. Better Service to New Areas.

The Emergency Plan does not eliminate or change feeder services except where it can cover new ground or add equipment where already needed. You will still take your usual car in the usual place if you are in an outlying district. But if your district has been inadequately served, you may find an additional line or more buses under this Plan making travel more convenient for you.

9. No New Buses Needed - Save Gasoline.

Under the Emergency Plan, with economics realized through re-routing and looping bus lines, it is possible to increase the buses serving some areas and still to transfer other buses to areas where this principle does not apply. This, together with repair of buses laid up, will release enough to give the increase suggested above in Objective #2 of 25%. If we do not put more buses on the streets, we as a City shall not increase our gasoline consumption, and this will mean that one more possible inroad on A gasoline will have been averted.

10. Assist the War Effort.

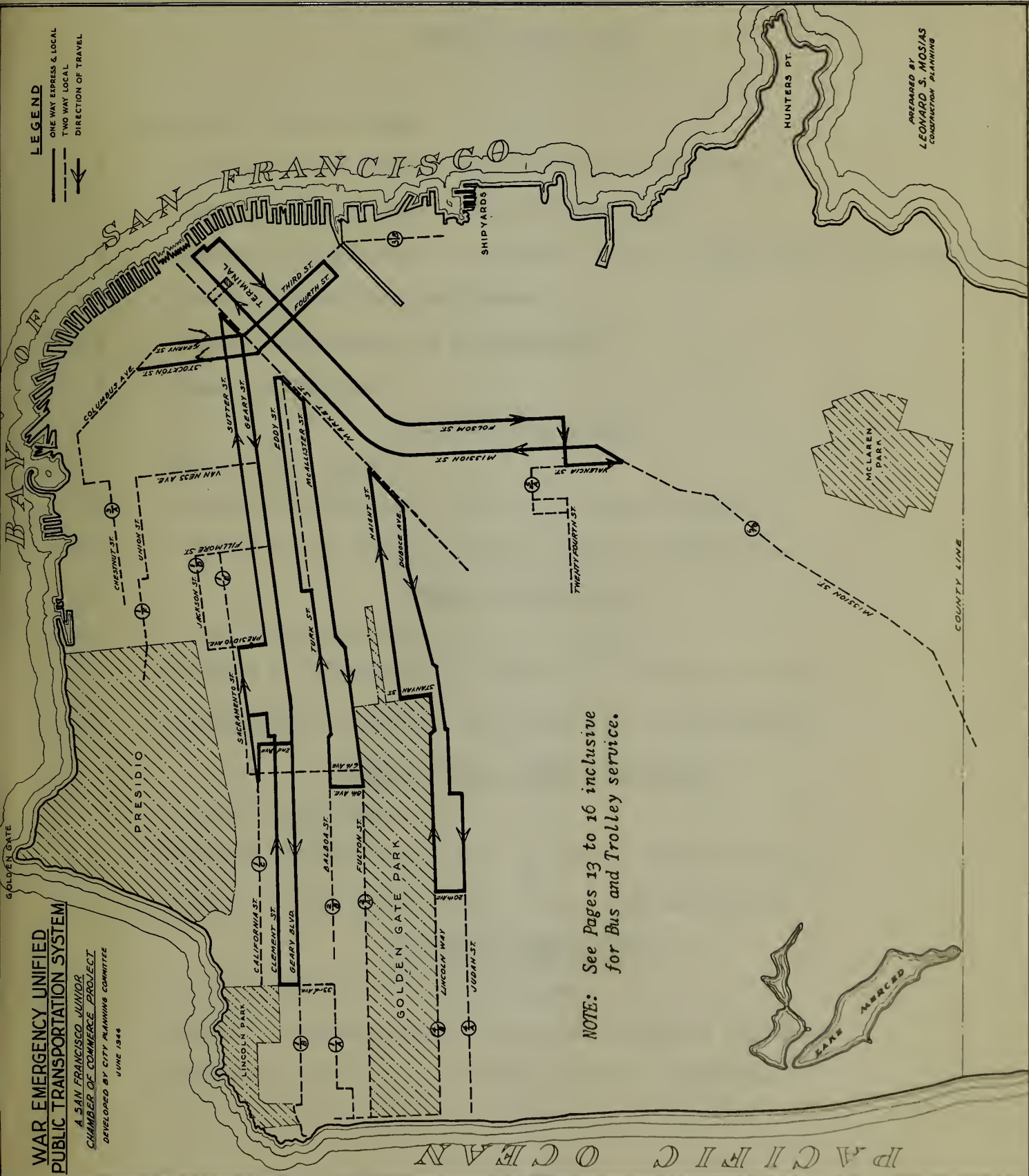
Any Emergency Plan that could be put into operation quickly with next to no new equipment or materials required, that would carry more people in San Francisco and carry them faster and more conveniently and comfortably, is a definite assistance to the war effort. This plan with its new connections and extensions provides faster and easier transportation to San Francisco shipyards and industrial areas.

WAR EMERGENCY UNIFIED PUBLIC TRANSPORTATION SYSTEM

A SAN FRANCISCO JUNIOR
CHAMBER OF COMMERCE PROJECT
DEVELOPED BY CITY PLANNING COMMITTEE
JUNE 1944

LEGEND

- ONE WAY EXPRESS & LOCAL
- TWO WAY LOCAL
- DIRECTION OF TRAVEL



NOTE: See Pages 13 to 16 inclusive
for Bus and Trolley service.

PREPARED BY
LEONARD S. MOSIAS
CONSTRUCTION PLANNING

SUTTER - GEARY LOOP

- 1 - Local to 33rd Avenue.
- 1 A - Express to 33rd Avenue - Local to Beach at Cabrillo.
- 1 B - Express to 33rd Avenue - Local to Sutro Baths.
- 1 C - Express to 8th Avenue & California - Local to 33rd Avenue and California
- 1 D - Local to Presidio and California
- 1 E - Local to 6th Avenue and Fulton Street
- 1 F - Local to Presidio.

McALLISTER - EDDY LOOP

- 2 - Local to 8th Avenue.
- 2 A - Express to 8th Avenue - Local to La Playa and Balboa.
- 2 B - Express to 8th Avenue - Local to Balboa and 30th Avenue.

KEARNY - STOCKTON LOOP

- 3 - Local to Columbus Avenue.
- 3 A - Express to Columbus Avenue - Local to Chestnut and Scott.
- 3 B - (Peak hours) Express to S.P. Depot - Local to Shipyards.

SUNSET TUNNEL - HAIGHT STREET LOOP

- 4 - Local to 20th Avenue.
- 4 A - Express to 20th Avenue - Local to 49th Avenue and Judah.
- 4 B - Express to 20th Avenue - Local to La Playa and Balboa.

MISSION - FOLSOM LOOP

- 5 - Local to Valencia and Mission Streets.
- 5 A - Express to 24th & Mission - Local to 24th Street & Hoffman.
- 5 B - Express to Valencia and Mission - Local to Daly City.

Section 1 - General

- 1.1 - General
- 1.2 - General
- 1.3 - General
- 1.4 - General
- 1.5 - General
- 1.6 - General
- 1.7 - General
- 1.8 - General
- 1.9 - General
- 1.10 - General

Section 2 - Specific

- 2.1 - Specific
- 2.2 - Specific
- 2.3 - Specific
- 2.4 - Specific
- 2.5 - Specific

Section 3 - General

- 3.1 - General
- 3.2 - General
- 3.3 - General
- 3.4 - General
- 3.5 - General

Section 4 - Specific

- 4.1 - Specific
- 4.2 - Specific
- 4.3 - Specific
- 4.4 - Specific
- 4.5 - Specific

Section 5 - General

- 5.1 - General
- 5.2 - General
- 5.3 - General
- 5.4 - General
- 5.5 - General

STOPS MADE BY EXPRESS CARS
USING LOOP SYSTEMS

SUTTER - GEARY LOOP

Number of Local Stops - one way --53

EXPRESS STOPS

WEST BOUND

Grant Avenue
Stockton Street
Powell Street
Jones Street
Van Ness Avenue
Fillmore Street
Divisadero Street
Presidio Avenue
First Avenue
Tenth Avenue
Eighteenth Avenue
Twenty-fifth Avenue
Thirty-third Avenue

EAST BOUND

Clement Street
Twenty-fifth Avenue
Eighteenth Avenue
Tenth Avenue
First Avenue
Presidio Avenue
Divisadero Street
Fillmore Street
Van Ness Avenue
Jones Street
Powell Street
Stockton Street
Grant Avenue
Kearny Street
Montgomery Street
Sansome Street
Geary Street

McALLISTER - EDDY LOOP

Number of Local Stops-one way--35

WEST BOUND

EXPRESS STOPS

EAST BOUND

Van Ness Avenue
Fillmore Street
Divisadero Street
Masonic Avenue
First Avenue
Eighth Avenue

Balboa Street
First Avenue
Masonic Avenue
Divisadero Street
Fillmore Street
Van Ness Avenue
Market Street

SUNSET TUNNEL-HAIGHT STREET LOOP

Number of Local Stops-one way--35

WEST BOUND

EXPRESS STOPS

EAST BOUND

Tunnel
Carl Street
First Avenue
Ninth Avenue
Twentieth Avenue

Lincoln Way
Ninth Avenue
First Avenue
Haight Street
Masonic Avenue
Divisadero Street
Fillmore Street
Market Street
Duboce Street

STOCKTON-KEARNY LOOP

Number of Local Stops-one way--23

SOUTH BOUND

EXPRESS STOPS

NORTH BOUND

Sutter & Kearny Streets
Geary & Market Streets
Third & Mission Streets
Third & Townsend Streets

Folsom Street
Market Street
Geary Street
Stockton Street &
Columbus Avenue

MISSION - FOLSOM LOOP

Number of Local stops-one way--40

OUT BOUND

EXPRESS STOPS

IN BOUND

First Street
Third Street
Fourth Street
Sixth Street
Ninth Street
Eleventh Street
Sixteenth Street
Twenty-fourth Street
Mission Street
Valencia Street
Mission Street

Twenty-sixth Street
Twenty-third Street
Twenty-second Street
Eighteenth Street
Sixteenth Street
Eleventh Street
Ninth Street
Sixth Street
Fourth Street
Third Street
New Montgomery
Second Street
First Street
Embarcadero

PHYSICAL DESCRIPTION OF LOOP PLAN
FOR SAN FRANCISCO
STREETCAR AND BUS SYSTEMS

The following plan can be successful only through unification of the Municipal and the Market Street Railway systems. It will provide for the people of San Francisco the following benefits:

1. A reduction of the present overcrowded condition of cars and buses.
2. A 25% speed-up of traffic.
3. The elimination of lengthy delays of waiting for cars.
4. Removal of the present hazardous condition on Market Street.
5. Enhancement of property values.

All of the above benefits will be accomplished through the:

1. Extension of the one-way street system.
2. Installation of loop systems.
3. Use of express and local cars.
4. Market Street shuttle system.
5. More comprehensive feeder system.
6. Full utilization of existing trackage and routes.

The following is a description of the "Loop System" proposed as an immediate solution to the transportation problem as it exists today in San Francisco.

I. SUTTER - GEARY LOOP

The Sutter-Geary Loop will start at Geary and Market extending west on Geary to Thirty-third Avenue, over Thirty-third Avenue to Clement, East on Clement to Arguello Blvd., Euclid to Parker Avenue, California to Presidio and Sutter returning to Market.

Geary will be one way for West bound traffic. Return of East bound traffic will be via 33rd Avenue, Clement, Arguella Blvd., Euclid Avenue, Parker Avenue, California, Presidio and Sutter Streets.

The right hand tracks will be utilized by local cars and the left hand tracks by the express cars.

Routing of cars using this loop will be as follows:

#1 - Local car which will traverse the loop only.

#1A - (Now the "B" Line) From Market via Geary to 33rd Avenue, Balboa, 45th and Cabrillo to the Great Highway. Return same route to 33rd Avenue, then continue via Sutter-Geary Loop.

- #1B - (Now the "1" and "2" Lines) From Market via Geary to 48th Avenue and to Sutro and Cliff House. Return to 33rd Avenue via same route, and continue via Sutter-Geary Loop.
- #1C - (Now the "C" Line) From Market via Geary to 2nd Avenue, Cornwall and California to Lincoln Park at 33rd Avenue. Return on California to Presidio Avenue and follow Sutter-Geary Loop.
- #1D - (Now the "3" Line) From Market via Geary, Fillmore, Jackson, Presidio Avenue to California. Return same route to Sutter and follow Sutter-Geary Loop.
- #1E - (Now the "4" Line) From Market via Geary, Fillmore, Sacramento, Lake, 6th Avenue to Fulton Street and Golden Gate Park. Return same route to Sutter and follow Geary-Sutter Loop.
- #1F - (Now the "D" Line) From Market via Geary, Van Ness, Union, Steiner, Greenwich to Presidio. Return same route to Sutter and continue on Geary-Sutter Loop.

II. McALLISTER FULTON - TURK EDDY LOOP

The McAllister Fulton-Turk Eddy Loop begins at McAllister and Market extending west on McAllister through the car barn onto Fulton, 8th Avenue to Balboa. Return via Balboa, Arguello to Turk, and Turk to Divisadero. At this point both Turk and Eddy will be utilized for the return east bound traffic to Market Street.

McAllister and Fulton will be one way for West bound traffic; the right hand tracks being for local cars and the left hand tracks for express cars. Return of East bound traffic, with the right hand tracks for local cars and the left hand tracks for express, will be via 8th Avenue, Balboa, Arguello and Turk as far as Divisadero. From this point East bound local cars will use the present one-way track on Turk Street. Express cars will turn north on Divisadero for one block to Eddy and use the present one-way track on Eddy to Mason Street and Mason to Market.

Routing of cars using this loop will be as follows:

- #2 This numbered car will traverse the loop only and will be for local traffic.
- #2A (Now the #5 Line) From Market via McAllister, Fulton, La Playa to Balboa. Return to 8th Avenue and continue via McAllister Fulton - Turk Eddy Loop.
- #2B (Now the #31 Line) From Market via McAllister, Fulton, 8th Avenue, Balboa to 30th Avenue. Return via McAllister Fulton - Turk Eddy Loop.

III. THIRD STREET-KEARNY - FOURTH STREET-STOCKTON LOOP

This loop starts at Third and Townsend extending West to 4th St. and continuing on 4th & Stockton to Columbus Avenue. The return is via Kearny to Market, then over 3rd to Townsend, completing the loop.

Third Street and Kearny Street to Columbus Avenue will be one-way for North bound traffic with the right hand tracks for local cars and the left hand for express. Columbus Avenue of necessity, as other carlines are involved, must remain two-way. However, the return via Stockton and Fourth Street will be one-way for South bound traffic with the right hand tracks for local cars and the express utilizing the left hand tracks.

Routing of cars using this loop will be as follows:

#3 - Local car

#3A - (Now the #F Line) From Townsend via Third Street, Kearny, Columbus Avenue, North Point, Van Ness Avenue and Chestnut Street to Scott Street. Return same route to Stockton and continue via Third Street - Kearny - Fourth Street - Stockton Street Loop.

#3B - Same as 3A only during peak hours local service will continue from S.P. Depot to the shipyards.

IV. SUNSET TUNNEL JUDAH STREET - LINCOLN WAY HAIGHT STREET LOOP

Loop starts at Market and extends West on Duboce through Sunset Tunnel to Carl, Arguello, Irving, 9th Avenue, Judah to 20th Avenue. Return will be via Lincoln Way, Frederick, Stanyan and Haight to Market. Duboce to Carl will be one-way for West bound traffic only with right hand tracks for local cars and the left hand for express. For one block on Carl (from Cole to Stanyan) traffic will remain two-way because of a conflicting carline; namely the #6 line. From this point on to Judah and 20th Avenue traffic will be one-way for West bound traffic. From this point the return to Market Street will be one-way for East bound traffic.

Routing of cars using this loop will be as follows:

#4 Local service following loop as described above.

#4A (Now the #N Line) From Market via Duboce through the Sunset Tunnel, Carl, Arguello, Irving, 9th Avenue, and Judah to 48th Avenue. Return same route to 20th Avenue and continue on Sunset Tunnel-Judah Street - Lincoln Way-Haight Street Loop.

#4B (Now the #7 Line) From Market via Duboce through Sunset Tunnel, Carl, Arguello, Irving, 9th Avenue, Judah, 20th Avenue, Lincoln Way, 48th Avenue through Golden Gate Park, La Playa to Balboa. Return same route to 20th Avenue and continue on loop to Market Street.

V. MISSION - FOLSOM STREET LOOP

The loop will run one block on Embarcadero from Mission to Howard, Howard to Steuart, Steuart to Folsom, Folsom to 24th Street, 24th Street to Valencia and Valencia to Mission Street. Return via Mission Street to Embarcadero, thus completing the Loop.

Embarcadero, Howard, Steuart, Folsom, 24th Street and Valencia will be one-way for southwest and south bound traffic and return of North and Northeast traffic will be one-way on Mission Street. Right hand tracks will be used for local cars and

the left hand for express.

Routing of cars using this loop will be as follows:

- #5 - Local service - travel loop only.
- #5A - (Now the #11 line) From Embarcadero via Folsom, 24th Street, Mission, 22nd Street, Chattanooga, 24th Street to Hoffman. Return via 24th Street, Dolores and to 22nd and Mission, then continue on Folsom - Mission Loop.
- #5B - (Now the #14 Line) From Embarcadero via Folsom, 24th Street, Valencia, Mission to Daly City. Return to Mission and Valencia and continue via Folsom - Mission Loop.

ROUTING OF STREET CARS NOT USING LOOP SYSTEMS

The following lines will be two-way traffic for local service only and will not utilize the loop systems already described.

- #K - From E. Bay Terminal up Market to Van Ness Avenue as local and to Castro as Express.
From Market and Castro via Twin Peaks Tunnel, Junipero Serra Blvd., Ocean Avenue and Brighton Avenue to Grafton as local.
- #L - From Ferry up Market to Van Ness Avenue as local and to Castro Street as Express.
From Market and Castro via Twin Peaks Tunnel, Ulloa, 15th Avenue, Taraval, 46th Avenue, Vicente, 47th Avenue to Wawona as local.
- #6 - From Haight, Masonic Avenue, Frederick, Clayton, Carl, Stanyan, Parnassus, Judah, 9th Avenue to Pacheco. Return same route.
- #9 - Market and Valencia via Valencia, Mission and split service Courtland Avenue to Banks and Richland to Andover. Return on Mission to 24th and Valencia to Market Street.
- #12 - From Ocean and Mission on Ocean, Junipero Serra Blvd., Sloat Blvd. to 48th Avenue.
- #J - From Market and Church via Church to 30th Street.
- #25 - From 6th Street and Mission via 6th Street, Bryant, Army, Bayshore and San Bruno to Wilde and Third Street.
- #22 - From 18th and 3rd Streets via 18th Street, Connecticut, 17th Street, Kansas, 16th Street, Church, Duboce Avenue, Fillmore to Broadway.
- #20 - From Ellis and Market via Ellis, Hyde, O'Farrell, Divisadero, Oak and Stanyan to Golden Gate Park. Return via Stanyan, Page, Divisadero and Ellis to Market.
- #H - From Laguna and Beach through Fort Mason to Van Ness Avenue, 11th Street, Division and Potrero Avenue to Army Street.
- #E - From Ferries via Washington, Columbus Avenue, Union, Larkin, Vallejo, Van Ness Avenue, Union, Baker and Greenwich to Terminus in the Presidio. Return same route to Columbus Avenue and Jackson, thence via Jackson to Ferries.
- #19 - From Larkin and Market via Larkin, Post, Polk, North Point, Larkin and Beach Streets to Aquatic Park.
- #21 - From Hayes and Market via Hayes, Stanyan to Fulton Street.

INSTRUCTIONS TO THE JURY

The following facts will be shown to you by the evidence and you will be asked to decide whether or not the defendant is guilty of the crime charged.

1 - The defendant is charged with the crime of murder in the first degree.

2 - The defendant is charged with the crime of murder in the second degree.

3 - The defendant is charged with the crime of murder in the third degree.

4 - The defendant is charged with the crime of murder in the fourth degree.

5 - The defendant is charged with the crime of murder in the fifth degree.

6 - The defendant is charged with the crime of murder in the sixth degree.

7 - The defendant is charged with the crime of murder in the seventh degree.

8 - The defendant is charged with the crime of murder in the eighth degree.

9 - The defendant is charged with the crime of murder in the ninth degree.

10 - The defendant is charged with the crime of murder in the tenth degree.

11 - The defendant is charged with the crime of murder in the eleventh degree.

12 - The defendant is charged with the crime of murder in the twelfth degree.

13 - The defendant is charged with the crime of murder in the thirteenth degree.

14 - The defendant is charged with the crime of murder in the fourteenth degree.

15 - The defendant is charged with the crime of murder in the fifteenth degree.

CABLE CAR ROUTING

California Street Route - From California and Market via California to Presidio Avenue.

Hyde-O'Farrell - Jones Route - From O'Farrell and Market via O'Farrell, Jones, Pine, Hyde to Beach and from Jones and Market via Jones to O'Farrell.

Powell-Jackson Cable - From Powell and Market via Powell, Jackson, Steiner, and Washington to Fillmore. Return via Washington and Powell to Market.

Powell-Bay Cable - From Powell and Market via Powell, Jackson, Mason, Columbus and Taylor to Bay.

MUNICIPAL BUS ROUTES

- Route #1 From California and 10th Avenue via California, 11th Avenue, Clement Street, 10th Avenue, Golden Gate Park, 9th Avenue, Kirkham Street, 7th Avenue, Laguna Honda Blvd., Portola Drive, Miraloma Drive, Yerba Buena Avenues, Plymouth Avenues, Monterey Blvd., Diamond Street, Chenery, 30th Street, to Dolores, 29th. Noe, U Turn, 29th, Mission, 30th, Dolores and return same route to 7th Avenue, then via Irving, 9th Avenue, Golden Gate Park and 10th Avenues. (The extension of this bus line eliminates Market #10 Bus.)
- Route #2 From Irving and 7th Avenue, via Irving, 23rd Avenue, Lawton, 48th Avenue, Noriega, 17th Avenue, Lawton, 22nd Avenue and Irving to 7th Avenue. (Buses will travel this loop in both directions.)
- Route #3 From 25th Avenue and Sea Cliff via Sea Cliff, El Camino Del Mar, 25th Avenue, Crossover Drive, (G.G. Park) 19th Avenue, Sloat Blvd., Junipero Serra Blvd., Worchester Avenue, Randolph, Orizaba Avenue, Board, Plymouth Avenue, Sickles Avenue, Huron Avenue, Alemany Blvd., Silver Avenue, Mission, Randall, Dolores and 30th to Church. To return, bus loops over 30th Street, Sanchez to Randall and continues same route.
- Route #4 From Aquatic Park at Hyde and Jefferson via Jefferson, Embarcadero, Berry and Third Street. Return via Townsend, Second, Berry, Embarcadero and Jefferson.
- Route #5 From Scott and Washington via Washington, Divisadero, Jackson, Scott, Chestnut, Broderick, Marina Blvd., Scott and return to Washington.
- Route #6 From Market and Castro via Castro, 19th Street, Eureka, 23rd Street, Diamond to Duncan, Marking "U" turn, thence via Diamond, 25th Street, Church, 24th Street, San Jose, 23rd Street, Potrero, 24th Street, Rhode Island. Return 24th Street, Church, 25th Street, Diamond, 23rd Street, Eureka, 19th Street, Collingwood, and Market to Castro.
- Route #7 From Forst Hills Station via Laguna Honda Blvd., Portola Drive, Evelyn Way, Teresita Blvd., Forrester, Joost, Edan, Monterey, Diamond, Tingley, Mission, Silver, Alemany, to Tingley and return same route to Fowler. Portola Drive and Laguna Honda to Forest Hills Station.
- Route #9 From Potrero, Army and Bayshore, via Bayshore, Ware, San Bruno, Olmstead, Girard, Woolsey, Somerset, Silver Avenue, and Bayshore to Army.
- Route #11 From Columbus and Union via Union, Stockton, Lombard and Telegraph Hill Blvd., to Coit Tower.
- Route #14 From Haight and Belvedere via Belvedere, Waller, Cole, Carmel, Clayton, 17th Street, Roosevelt Way and 14th Street to Market. Return via Market to 15th, Castro, 14th Street, Roosevelt Way, Buena Vista Terraco, Buena Vista Avenue, Upper Terrace, Loma Vista Terrace, Roosevelt Way, 17th Street, Cole and Haight.

MARKET STREET RAILWAY TROLLEY

- Route #33 (Trolley Bus) From 3rd Street and Bryant via 3rd Street, Harrison, 14th Street, Folsom Street. (At this point route will split) Route #1. Folsom Street, 18th Street, Market, Clayton, Ashbury, and Waller to Stanyan; Return Stanyan, Haight, Schrader, Waller, Ashbury, Clayton, Market, 18th, So. Van Ness, 14th, Harrison, 4th, Bryant, to 3rd Street. Route #2. 14th Street, So. Van Ness, Army; return same route.

MARKET STREET RAILWAY BUS LINES

- #15 - From Geneva and Mission via Amazon, London, Geneva, Santos, Sunnydale Avenue, Bay Shore Blvd., San Bruno Ave., and Third Street to S.P. Depot. Return same route. (The extension of this line to Fisherman's Wharf is discontinued as adequate transportation is already provided.)

- #24 - From Fillmore and Marina Blvd., via Fillmore, Union, Steiner, Broadway, Fillmore, Jackson, Divisadero, Duboce, Noe, 15th, Castro, 17th (At this point route will split) Route #1 - 17th, Mississippi, Mariposa and 3rd Street. Return 3rd to 20th, Tennessee to Mariposa and then same route. Route #2 - Continue from Castro and 17th via Castro to 26th Street.

- #26 - From 1st & Mission via 1st, Howard, So. Van Ness, 14th Street, Guerrero, San Jose, 30th, Chenery, Diamond, San Jose to Daly City. Return same route to 3rd, Mission to 1st Street.

- #30 - From Mission & 26th, via 26th, Bryant, Army, to 3rd. Return same route.

- #50 - Bayshore and Sunnydale Avenue, Via Bayshore Blvd., McDonald, Schwerin, Geneva Avenue, South Hill Blvd., Chicago Way, Cordova, Prague, Naples, Geneva Avenue to Mission. Return via Mission, Amazon, London, Geneva Avenues, etc.

- #52 - From Mission and Brazil via Mission, Excelsior, Vienna, Brazil, Prague, Russia, Moscow, Amazon, Naples, Brazil to Mission.

- #53 - From 9th and Market via 9th, Bryant, 16th Street, San Bruno Avenue, 19th, Vermont, 20th, Rhode Island, Southern Heights Blvd., 22nd and Wisconsin, 23rd, Connecticut to 25th Street. Return via Dakota, 23rd, Wisconsin and same route to 9th and Howard, then Howard to 10th and Market to 9th Street. (Combined with #19)

- #54 - From Mission and Silver Avenue, via Mission, Maynard, Silver Avenue, Quesada Avenue, Quint, Oakdale Avenue, Third Street, Evans, Hunters Point Blvd. and Innes Avenue to Hunters Point Naval Drydock.

- #55 - From Ferry Building via Sacramento Fillmore. Return Sacramento, Larkin and Clay.

NEW EXTENSIONS OF BUS LINES

Market Street Lines

24 - Route #1 to 3rd Street

53 - 16th & Bryant to 9th & Market Street

Municipal Lines

Route # 1 - From Monterey Blvd. and Edna to 29th and Noe Street.

Route # 2 - From 35th Avenue, and Noreiga to 48th Avenue; from 22nd Avenue and Noriega to 17th Avenue and Lawton; from 22nd Avenue and Irving to 7th Avenue and Irving Street.

Route # 5 - From Scott & Chestnut to Divisadero and Washington.

Route # 6 - From 24th & Church to 24th & Rhode Island

Route # 7 - From Detroit & Melrose to Silver & Mission

Market Street Railway Bus Lines Eliminated

- Route #10 - Glen Park
Supplanted by extension of Municipal Bus Line #1.
- Route #16 - Third and Kearny
Adequate service is provided by Municipal "E" car line; Embarcadero Bus and Stockton-Kearny Loop.
- Route #19 - Ninth and Polk
Supplanted by increased street car service on Polk and Larkin Streets and extension of Market Street Railway Bus #53 from 16th and Bryant to 9th and Market Streets.
- Route #25 - San Bruno Avenue
Adequate service is provided by existing Market Street Railway #25 car line.
- Route #28 - Ferry and S.P. Depot
Adequate service is provided by Mission-Folsom Loop and Municipal Embarcadero Bus line #4.
- Route #35 - 24th Street
Supplanted by extension of Municipal Bus line #6; to 24th and Rhode Island; Mission-Folsom Loop; and extension of Municipal Bus line #1 to 29th and Noe Streets.
- Route #41 - S.P. Depot to Second and Market Streets
Adequate service provided by Mission-Folsom Loop; Third and Fourth Street Loop and Market Street Railway Bus line #26.
- Route #42 - Third and Sansome Streets
Adequate service provided by Municipal "E" car; Market Street Railway Bus line #55 and California Street Cable connecting to Stockton-Kearny Loop.

Market Street Railway Street Car Lines Eliminated.

- #17 - Adequate service provided by Municipal Bus line #3.
- #8 - Adequate service provided by Trolley Line #33 and Market Street Shuttle.

General Street Railway for Street Railways

Route 101 - General Street
 General Street is a street of General Street 101.

Route 102 - General Street
 General Street is a street of General Street 102.

Route 103 - General Street
 General Street is a street of General Street 103.

Route 104 - General Street
 General Street is a street of General Street 104.

Route 105 - General Street
 General Street is a street of General Street 105.

Route 106 - General Street
 General Street is a street of General Street 106.

Route 107 - General Street
 General Street is a street of General Street 107.

Route 108 - General Street
 General Street is a street of General Street 108.

General Street Railway for Street Railways

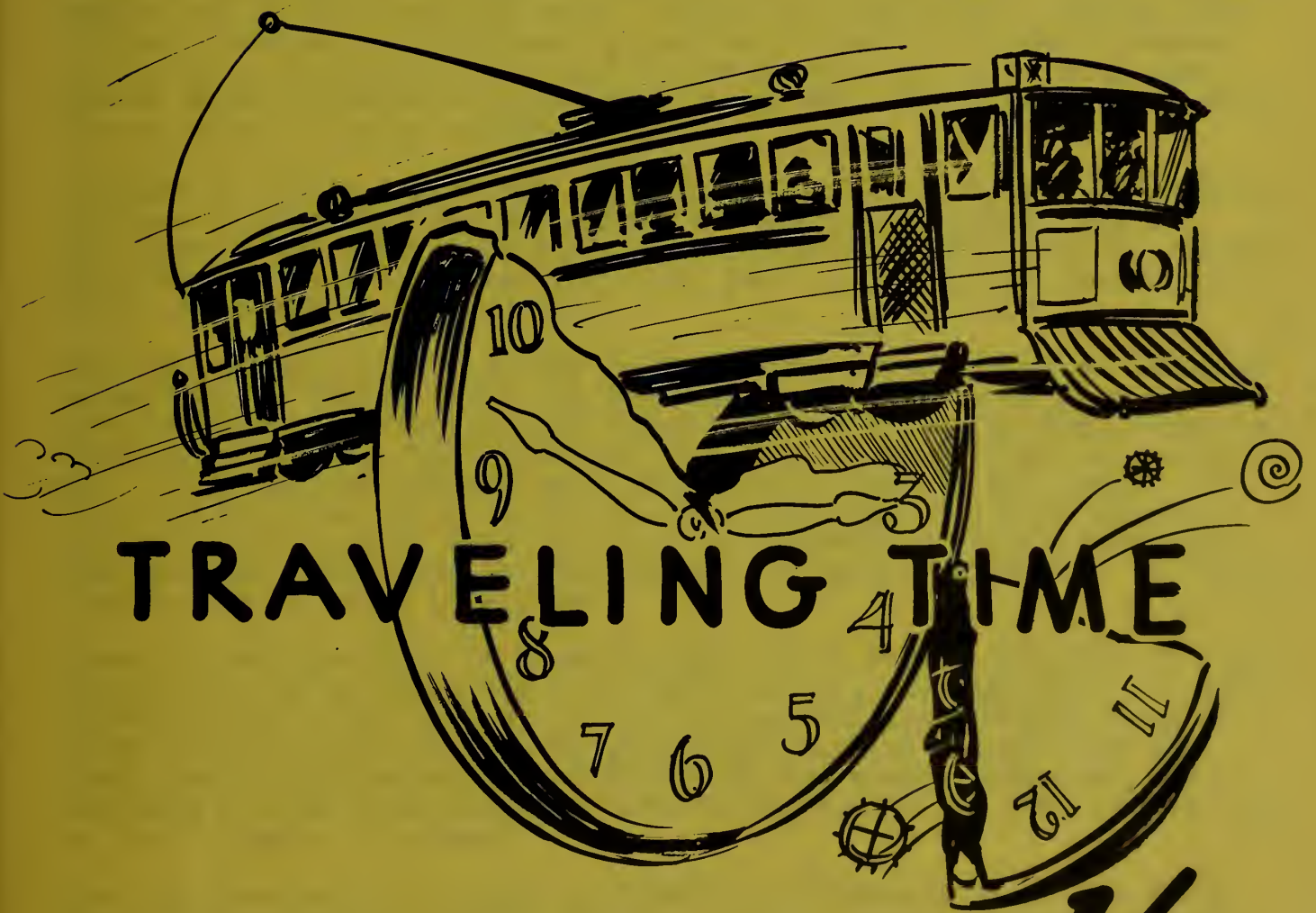
Route 109 - General Street
 General Street is a street of General Street 109.

Route 110 - General Street
 General Street is a street of General Street 110.

SUMMARY OF REQUIRED PHYSICAL ALTERATIONS
AND ESTIMATED COSTS

<u>LOCATION</u>	<u>CONSTRUCTION</u>	<u>ESTIMATED COSTS</u>
Eddy and Divisadero Street.....	One Track Turn.....	\$ 4,800.00
Geary Blvd. and 33rd Avenue.....	One Track Turn.....	5,000.00
Mason and Eddy Streets.....	One Track Turn.....	5,000.00
Judah and 20th Avenue.....	One Track Turn.....	5,000.00
Turk and Divisadero Streets.....	One Track Turn.....	5,100.00
Balboa and 8th Avenue.....	Two Track Turn.....	10,000.00
Masonic Ave. & Haight Street.....	New Switch Back.....	3,000.00
Mission Street & Embarcadero.....	Two Track Turn.....	10,000.00
6th Street & Mission Street.....	New Switch Back.....	3,000.00
Kearny Street & Columbus Ave.....	Two Track Turn.....	5,000.00
Valencia and Mission Streets.....	Two Track Turn.....	10,000.00
Market and Van Ness Avenue.....	Two Switchovers.....	7,000.00
Haight and Gough Streets.....	Two Track Turn.....	10,000.00
Stockton and 4th Streets.....	Two Track Turn.....	10,000.00
Sutter and Market Streets.....	Two Track Turn.....	10,000.00
Turk-Mason & Market Streets.....	Extension of Mason St. Track and one track turn from Turk into Market.....	5,700.00
Market and Geary Streets.....	One Track Turn.....	3,000.00
Market and McAllister Streets.....	Two Track Turn.....	6,000.00
Market and Duboce Streets.....	One Track Turn.....	3,000.00
Market and Church Streets.....	New Switch Back.....	5,000.00
17th and Market Streets.....	Two New Turns.....	10,000.00
17th and Market Streets.....	Two New Switch Backs.....	6,000.00
22nd and Mission Streets.....	Two Track Turn.....	10,000.00
24th and Folsom Streets.....	Two Track Turn.....	73,000.00
24th and South Van Ness		
To 24th and Valencia.....	Two Blocks Double Track.....	
24th and Mission Streets.....	Two Track Turn.....	
24th and Valencia Streets.....	Two Track Turn.....	10,000.00
California Street and 6th Avenue.....	Two Track Extension.....	
TOTAL.....		\$ 234,600.00

Express SERVICE



**KNOCKING OFF $\frac{1}{4}$
OF TRAVELING TIME**

SAVE 25% TRAVEL TIME

The 25% over all saving in travel time under the proposed plan is accomplished through adding together the time savings made possible under 5 parts of this plan.

The 1st, and most important as well as the most easily measured, is the saving of time on the express and local system. We rode on many of the cars of both lines and noted the total time spent in stopping after the cars left Market Street. We found that this amounted to from 20% to 39% of the total time taken by the cars in going from Market Street to the end of their lines during the rush hour at night. This averages about 30%.

By deducting the time used by four out of five of these stops, we remove 80% of the stopping time: 80% of the 30% total stopping time is 24%, which saving is almost a quarter of the total time consumed in travel by these cars when off of Market Street. This much time can be saved by express operation of some cars, stopping only at main transfer points about every 5 blocks.

It must be kept in mind that the greatest saving in time will be made by those people who live out beyond the end of the loops, and who will have local service from the express cars at these points. There will also be local cars serving every part of the entire system, in addition to the express service.

The 2nd saving in time is made on the Market Street shuttle. Instead of waiting on Market Street as you usually do after work or shopping; under the proposed shuttle you would take the first car that comes by without waiting to fight your way onto any particular car as you do now. This shuttle car you have boarded will stop at all loops. If you ride the N or the 7 or 17, you will transfer at Duboce Street, but you don't have to wait for a car -- there will be one there waiting for you. And since it will leave on a regular schedule, you won't have to run to catch it either.

There is one exception to boarding any Market Street shuttle: if you ride a K or an L, using the Twin Peaks tunnel, you will wait for and take the K or L just as you do now, but at Van Ness Avenue, both of these lines will become express, stopping only at Duboce loop terminal and at the end of Market Street at the tunnel entrance, and becoming a local upon emerging from the tunnel at the West Portal end, as they operate at present.

Quoting from page 10 of the Sr. Chamber of Commerce Report on Staggered Working Hours 4/13/42, "At the present time all streetcars are routed either to the Ferry Building or to the San Francisco Bay Bridge Terminal, requiring approximately fifteen minutes to make the round trip from Kearny Street. Since only about seventy-five per cent of the outbound streetcar passenger load originates in the area east of Kearny Street, there is a fifteen minute loss in running time for about 100 cars now unnecessarily traversing this route during the peak period and congesting the available trackage."

DATE FOR DATE TIME

The two over all results in terms of the number of people who have been helped by the work of the two groups are as follows:

The first group, which was organized in 1914, has since that time been working in the same way as the second group. It has been successful in its work, and has helped many people. The second group, which was organized in 1915, has also been successful in its work, and has helped many people. The two groups have been working together since 1914, and have been successful in their work.

It is interesting to note that the two groups have been working in the same way since 1914. They have both been successful in their work, and have helped many people. The two groups have been working together since 1914, and have been successful in their work.

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There is one exception to the rule that the two groups have been working in the same way since 1914. This is the case of the first group, which was organized in 1914. It has since that time been working in the same way as the second group. It has been successful in its work, and has helped many people.

Question: How many people have been helped by the work of the two groups? Answer: The two groups have helped many people. The first group, which was organized in 1914, has helped many people. The second group, which was organized in 1915, has also helped many people. The two groups have been working together since 1914, and have been successful in their work.

The 3rd saving is in one way streets for streetcars as well as for automobiles. Here the saving is mostly at intersections, where left hand turns do not interfere with all traffic as they do with two way streets. There is also the factor, however, of streets wide enough for three lanes, one of which is never used unless all traffic is in one direction.

The 4th saving is in less crowding of streetcars, permitting people to move faster when getting on and off. The redistribution and faster operation of the cars will clearly create as much extra room as there is time saved. During normal hours operation this observation is quite true, so that the saving is 25% extra capacity for the express cars of the 5 loops plus the capacity of the many cars now laid up for lack of repairs. This extra capacity will tend to reduce the average passenger load per car. Many cars are now filled with 125 to 150 people -- hanging room only. If we will reduce this to 100 or less per car, people can get on and off without unduly delaying the cars.

The saving during the rush hours, however, is much greater than that just shown. The rush hours cover a two hour period. It is plain that if a car makes a round trip in two hours it can carry only one load during the rush hour, but if it can make two trips it can carry two loads. This is better than having two cars since it carries just as many people, creates only half as much traffic congestion, costs less to operate, and gives better, faster service. Many of our cars today make a round trip in an hour and a half. We can reduce this time to one hour or less, as shown through speeding the service by eliminating delays, and the Market Street bottlenecks. This then, will in the same manner increase our effective car capacity not double as shown in the example, but by half again, which is twice the capacity realized during normal hours. This is not magic and neither are there any tricky figures involved. The difference in saving is possible only because of the inefficiency of our present system under rush hour conditions, and because the extremely heavy rush hour traffic makes capacity loading necessary.

The 5th saving removes one of the causes of the Market Street bottleneck: It ends crossovers of inbound cars to southside tracks at about 7 intersections. Each of these crossovers block either 3 or 4 tracks every time any car uses them. The only crossovers remaining are those of the crosstown cars and of the automobile traffic, which move with the signals. This is done of course by the loop system, which keeps all lines except the shuttle service off of Market Street.

TIME GAINED -- EXPRESS over LOCAL

The question once arose, whether the express system would actually gain as much as 25% of travel time, because in our original survey we had recorded the stopping time of the cars, but had made no record of the number of people getting on or off of the cars. The assumption being that the same number of people would get on or off whether the cars were express or local, and that therefore the express cars would be delayed more than the calculated amount of time. Our original conclusions having been drawn from actual stopping -- not slowing or pickup -- time eliminated.

To satisfy ourselves of this, we made a further survey, in which we timed the stopping time of streetcars, at intersections without traffic signals, and correlated these times with the number of passengers getting on and off.

We learned:

That it takes $4\frac{1}{2}$ seconds for a car to stop and start, regardless of whether any one gets on or off.

That on the average, every passenger that gets on or off, adds 1 second to the stopping time of the streetcar.

That in $4\frac{1}{2}$ seconds, on a clear street, a car will have travelled further than half a block.

That in the time a car begins to slow down until it regains full speed, after picking up 1 passenger, another car will have gone further than one block.

We have therefore concluded that since most of our loops contain an average of 35 local stops (from 23 to 53), and since the express cars will eliminate $\frac{4}{5}$ or say 28 of them, that at the very minimum, an express car must complete a round trip 28 blocks ahead of a local car or $\frac{4}{5}$ sooner, if so routed.

The preceding case report, published in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, Vol. 10, No. 1, p. 10, is reproduced here in its original form as far as possible. The only change made is the correction of the title of the case report, which was originally "A Case of Acute Myocarditis" and is now "A Case of Acute Myocarditis with Pericarditis". The case report is reproduced here in its original form as far as possible. The only change made is the correction of the title of the case report, which was originally "A Case of Acute Myocarditis" and is now "A Case of Acute Myocarditis with Pericarditis".

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THE JOURNAL

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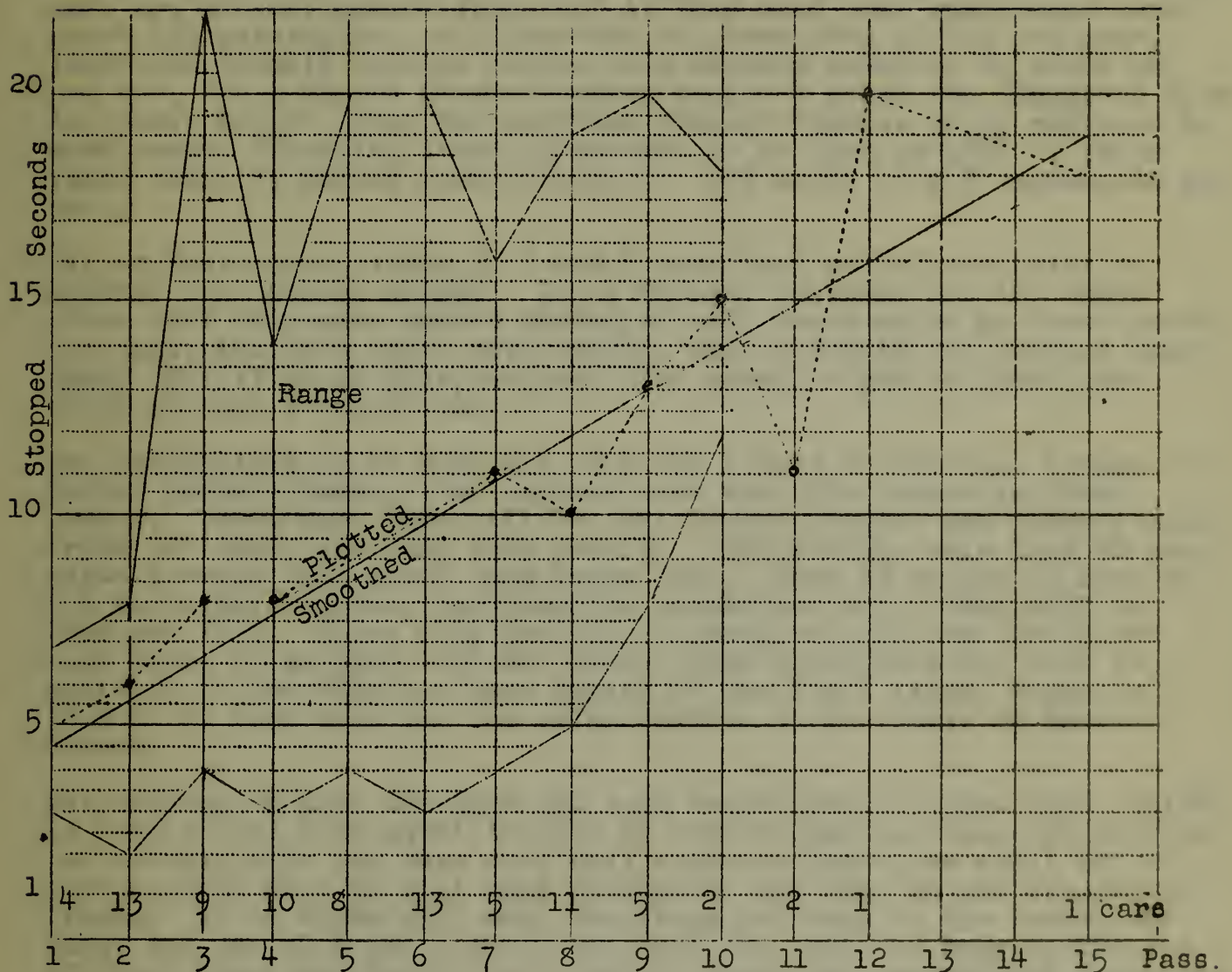
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LOADING AND UNLOADING



This graph shows the average of times required to unload and load a given minimum number of people as compared with a given maximum number. It demonstrates that the time per person is not constant, apparently because of the base time required simply to stop and start the car. Even with more passenger movement per stop an express system would save some time over a local car by elimination of the base deceleration and acceleration times, which are not entirely reflected in the base time shown on starting and stopping in the above graph.

SHUTTLE CAR REQUIREMENTS

On Market Street at the evening rush hour we now have about 116 cars outbound, passing 4th Street per hour with a 30 second headway. These cars are not all packed full, but if they were they would each carry about 150 passengers, or altogether not more than 17,400 per hour. (American Transit figures reduce this maximum capacity to about 125 per car, but a Senior Chamber survey prepared under the Staggered Working Hours Report, show the American Transit figures being exceeded in some cases, "Carrying from 105 percent to as much as 130% of their rated capacity during peak periods." 130% would be 163 passengers per car.)

All of these cars except 32 K and L cars turn off at one point or another from Market Street. If we should, however, not let these other cars come onto Market Street at all, there would be fewer traffic jams, the cars could move faster, and we should not need as many cars. But if we do this, we must find a way to get to these cars where we have stopped them.

One possibility is to keep the 32 K and L cars on the full length of Market Street, making them express cars when they reach Van Ness Avenue. These cars then will be able to move faster and thereby more trips per hour, carrying more people. They will be able then to complete a round trip about once every hour. Then if we put 50 cars on the two middle tracks, carrying 150 people per trip, that will be 7500 per trip. Since they can make a round trip to the tunnel and back twice in an hour they can carry 15000 passengers per hour in addition to the 4800 per hour riding on the K & L lines, which is 19,800, or more than are now being carried on the whole of Market Street.

But because we have the cars and want better service than this, which is barely more than equal to what we have today, and since we know we can operate with the cars only half a minute apart, we shall add 28 cars more so that we will have altogether 110 cars on the two center tracks. 78 of these will make two trips per hour to the tunnel and back, and the 32 K and L cars will make one trip per hour to the end of their lines and back. Only half of these cars would then be on the Market Street shuttle loop at any one time, so that the maximum cars on the shuttle would be 78 plus 16 or a total of 94.

These then, not loaded at 163 or 150 people per car, but loaded up to 100 per car in the rush hour, permitting people to get on and off easily, will carry 18,800 passengers per hour in relative comfort. This is more than there are riding these cars today.

Car No.	Battery St.		3rd St.		4th St.		5th St.		Av. Cars / Pass. Tot. Pass. / per Car	
	Cars	Pass.	Cars	Pass.	Cars	Pass.	Cars	Pass.		
1	5	18							5 18	3
2	5	15							5 15	3
3	5	40							5 40	8
4	5	28							5 28	6
5	12	102	6	50	13	174	10	100	10 426	43
6	5	10	5	26	5	32	6	52	5 120	24
7	7	40	6	43	8	78	8	58	7 219	31
8	2	3	2	5	4	31	3	23	3 62	21
9	5	53	11	51	13	91	12	106	10 301	30
17	2	50	7	53	7	88	7	72	6 263	44
21	7	87	8	48	5	47	5	45	6 227	38
31	7	60	11	98	13	195	17	220	12 573	48
B	10	55							10 55	6
C	12	45							12 45	4
D	15	77							15 77	5
J	5	18	15	153	20	162	17	150	14 483	35
K	15	67	15	183	17	124	20	205	17 579	34
L	15	60	15	162	17	159	19	126	16 507	32
N	17	197	18	205	25	202	21	194	20 798	39
TOTAL	156	1025	119	1077	147	1383	145	1351		

Above are the average figures collected at the indicated points. They tend to show how many people board these outgoing streetcars during an average hour between 4 and 6 P.M. during the rush period at these points.

THIS *or*

**MORE CARS
A N D
MORE SEATS**

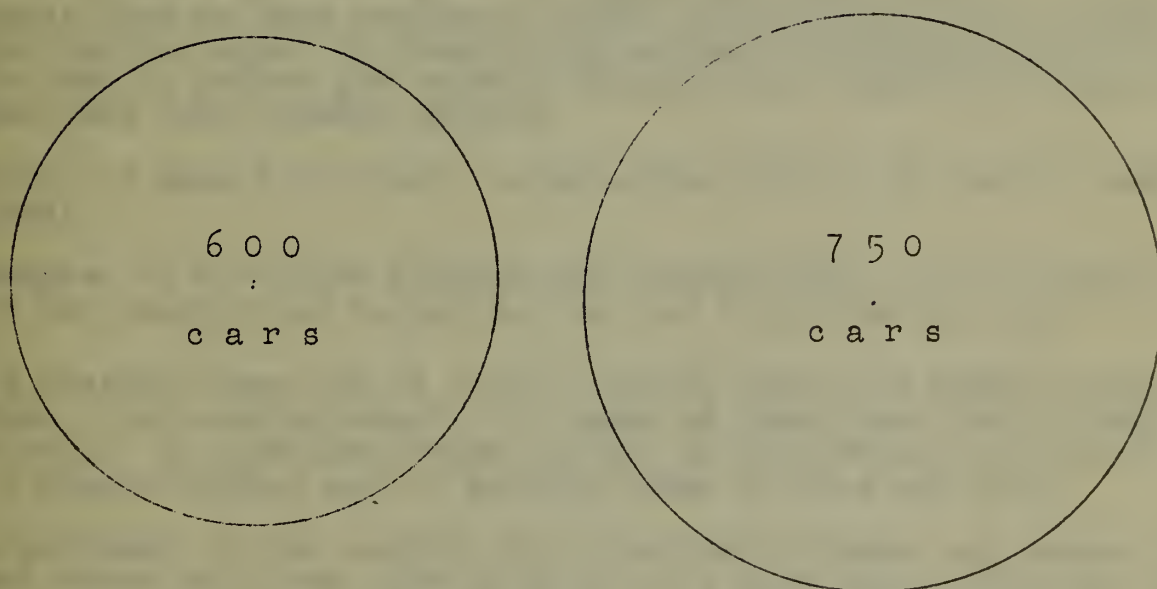


**HANGING
ROOM ONLY**



**NO
CROWDING**

EFFECT OF EMERGENCY PLAN FOR UNIFIED OPERATION ON NUMBER OF CARS



A 25% faster service on the present capacity basis would increase our combined services' cars from about 600 to 750 without expenditure of a cent for new rolling stock. This figure utilizes some cars now laid up for repairs, or about 90% of total, combined rolling stock.

CARS AVAILABLE FOR SHUTTLE AND FOR OTHER PURPOSES

Naturally, one of the first questions is, "Where are we going to find the 78 cars required for the Market Street shuttle?" And, "How can we improve the service if we rob cars from lines already short of equipment?"

The following table indicates the reservoir of cars we now have. Re-routing to adopt the proposed system will supply at least 136 cars alone, as shown. There are in addition some 200 more parked row on row in car barn areas, unused.

While this table only shows how to equal existing service. It also indicates that we have available, after providing for the shuttle service and the equal of present day service, at least 258 cars which may be used to reduce the headway between cars, thereby giving more frequent and less crowded service.

258 cars, it should be noted, is more than 1/4 of our entire combined equipment!

As examples of how these figures were constructed, the following illustrates two examples as worked out for the B and the 5 lines:

1 - At present there are 12 B cars leaving Geary and Market Streets per hour, five minutes apart. It takes $1\frac{1}{2}$ hours for them to make the round trip. It therefore takes 18 cars on the tracks to maintain this 5 minute headway and to provide these 12 cars per hour.

If as proposed, by the express and local loop system, we reduce the average round trip time from $1\frac{1}{2}$ hours to 1 hour and 13 minutes, and need dispatch but 10 cars per hour, it will then take only 12.2 cars (or 13, to give a few more seats) on the tracks to maintain this headway and to provide these 10 cars per hour.

This is a net saving of at least 5 streetcars on this line alone that may be used either for improving B line service or for transfer to other points of greater need.

2 - At present there are 12 #5 cars passing McAllister and Market Streets per hour on a 5 minute headway. It takes 90 minutes for them to make a round trip to the terminal. It therefore takes 18 cars on the tracks to maintain this 5 minute headway, providing these 12 cars per hour.

If we do as proposed, by installing the express and local loop system, we will reduce the average round trip time from 90 minutes to 42 minutes (average time, express and local, on loop) and need dispatch but 10 cars per hour.

TRANSITATION FOR THE NEW YORK CITY

Basically, one of the first questions is "When and where to go?" The answer is "When and where to go?" The answer is "When and where to go?"

The following table indicates the frequency of service at each station. The frequency of service at each station is indicated in the table.

While this table only shows the frequency of service at each station, it also indicates that the frequency of service at each station is indicated in the table.

The table is divided into two parts: one for the frequency of service at each station and one for the frequency of service at each station.

An example of how the frequency of service at each station is indicated in the table is shown in the table.

1 - At present there are 15 cars per hour on the line. This is the frequency of service at each station.

It is proposed to increase the frequency of service at each station to 20 cars per hour. This is the frequency of service at each station.

This is a table showing the frequency of service at each station. The frequency of service at each station is indicated in the table.

2 - At present there are 15 cars per hour on the line. This is the frequency of service at each station.

It is proposed to increase the frequency of service at each station to 20 cars per hour. This is the frequency of service at each station.

We make this saving as follows:

It takes 24 minutes from Terminal to McAllister, round trip.
It takes 60 minutes from McAllister to Beach , round trip.
It takes 36 minutes from McAllister to 8th Ave., round trip.

By leaving out the 24 minutes not on the loop, it being replaced by the appropriate amount of shuttle time and figured in with those cars and their loop, we may reduce the 60 minutes by 25% for the time saved by the express service, and put five cars on for the resultant 45 minutes and 3 for the 36 minute run to 8th Avenue because it will then require only 8 cars on the tracks to maintain the five minute headway and provide these 10 cars per hour to carry exactly the same number of people as now.

This is a net saving of 10 streetcars on this line alone that may be used either for improving the #5 line service or for transfer to other points of greater need.

PRESENT SYSTEM

Loop	1 / 2 / 3 / 4 / 5												
Cars	B	1 & 2	C	3	4	D	5	31	F & 15*	N	7	11	14
Route	1A	1B	1C	1D	1E	1F	2A	2B	3A 3B	4A	4B	5A	5B
Average No. per hour	10	10	12	5	5	15	12	12	19 *	20	7	24	40
Pass. per hr. @ 125 per car	1250	1250	1500	625	625	1875	1250	1500	2400 *	2500	875	3000	5000
Max. in use in X peak 2 hours	28	23	25	7	10	15	24	22	19 *	29	15	21	52
Duration of round trip	80'	90'	90'	60'	75'	60'	90'	70'	50' *	90'	90'	55'	78'
Headway	6'	6'	5'	10'	10'	4'	5'	5'	3' *	3'	9'	2½'	1½'

LOOP SYSTEM SAME CAPACITY SAME LOADING													
-(Local)													
Duration LO round trip	65'	65'	45'	40'	45'	40'	30'	30'	57'	30'	30'	35'	60'
Duration EX (Express)	55'	60'	60'	40'	45'	40'	57'	44'	30'	45'	47'	45'	58' or less
Number of express cars	7	7	7	0	0	0	6	6	15	3	2	4	8
Number of local cars	3	3	5	4	4	10	2	3	4	7	5	14	25
Total cars Y required	10	10	12	4	4	10	8	9	19 *	10	7	18	33
Difference between X & Y can be reassigned	18	13	13	3	6	5	16	13	0 *	19	8	3	19

*#15 cars were not included above for lack of sufficiently accurate information: they would add their service to the 3rd loop. #12 and #6 routes are considerably shortened, making approximately half of these cars available for reappportionment. #17 can be eliminated and cars appropriated.

Reassignable cars total about	136	-
Repairable	200	-
Total	336	-
Shuttle requires	78	-
Available for improving service	258	-

A CLEAN
SWEEP
of
MARKET STREET
CONGESTION...



CAPACITY INCREASE IN THE CONGESTED AREA

The proposed plan will increase the capacity of the present transit system to carry passengers in not less than the direct proportion to the time it will save, because if a car can make a trip 25% faster, it can pick up a new load 25% sooner, thus increasing its operating capacity by 25%, or if calculated at the rush hours when a car can make 2 trips instead of $1\frac{1}{2}$, the operating capacity will in some cases be increased by 50%. In addition to this capacity increase on the express and shuttle systems, there has been nearly $\frac{1}{4}$ of our total system laid up for want of repairs and operators....a condition which is today being improved.

Still more capacity is gained through keeping an uninterrupted shuttle system on Market Street and confining the feeder lines to their loops and branches, thus unclogging the arteries and releasing cars for transportation instead of making them into crowded reservoirs of people.

The congested area of San Francisco, extending from 1st Street to 6th Street is now actually served by 8 independent, outbound transit lanes consisting of 2 Market Street, 1 Mission Street, 1 Howard, 2 Kearny and 3rd, 1 Stockton, 1 Ellis, plus the cable lines. When this is split up into separate closed loops as proposed, and a shuttle, there will be 11 lanes: 1 Market, 2 Mission-Folsom, 1 Howard, 2 Kearny-3rd/Stockton-4th, 2 Geary-Sutter, 1 Ellis, 2 Eddy-McAllister, plus the cable lines. This is an apparent gain of 3 sets of tracks, and by American Transit figures, about 40,000 people per hour! This however, is a trick of the figures. The tracks are all there now and working.

But this statistical trick has a backlash, because when the system is split up into loops as proposed, loading and discharging in this highly congested area, as it will, the same equipment can actually handle a lot more people than it does now. It is probable that these 40,000 extra people can really be carried, and there is nothing complicated about it either.

If you will go to Stockton and Market Streets between 4 P.M. and 6 P.M. some night as we did, and count all the cars that go by on the outbound tracks in one hour, that figure will be near to 116 cars, which was our average. If a few of the cars laid up were available, they could be added on the inside track, but the outside track can carry no more because the spaces between the cars are blocked up down towards the Ferry Building by the B, C, D, and the 1, 2, 3, and 4 cars which turned off at Geary and at Sutter Streets. There is no point in adding cars to the inside track, because they are not full anyway. So here we have two transit lanes at Stockton and Market Streets carrying 17,400 passengers per hour, when American Transit figures say that two lanes should be able to carry 27,000 passengers per hour with only 75 people per car. What's wrong?

Those two lanes probably do carry 27,000 passengers where four cars turn off at Sutter Street, and maybe 24,000 where three more cars turn off at Geary Street, and perhaps more, loaded as they are, but the tracks aren't being worked anywhere near to full capacity by the time the cars get to Stockton and Ellis Streets. So we have a case where the cars are being overloaded at all points, but where the tracks are far underloaded. The only way the capacity of these two transit lanes may be increased is to keep them at work on Market Street, uniformly, all the way.

If we do this, we shall no longer have to walk to the terminal to get onto a B car, but will walk to Geary Street at Kearny, and not take the shuttle car at all. If we want to take the N, we will board the shuttle, and there will be an N waiting at the loop terminal. If we work at the Emporium and go home on the No. 2, we will take the shuttle to 3rd, walk across and transfer to a No. 2 waiting there for us.

There has been some question as to whether people will prefer to walk a block to board their homebound streetcars, or whether they will take a shuttle car, causing an undue congestion on Market Street.

We can only point to the following figures, gathered during one hour between 4 P.M. and 6 P.M. over several evenings and averaged:

People boarding
all cars past these streets

1000	Battery
1100	3rd
1400	4th
1400	5th
<u>4900</u>	

But during this same period of time, 154 outbound cars passed Battery Street. Using American Transit figures of $2\frac{1}{2}$ times the seating capacity being equal to full load, as the cars were loaded as they passed 4th Street, and assuming that each car will seat 50 passengers; then there were 17,950 passengers aboard at this point.

It would seem that a walk to avoid congestion is already prevalent.

EFFECT OF ONE WAY STREETS ON TRADE

These figures will give some idea of what effect on auto traffic combined 1 way streets and gasoline rationing have had.

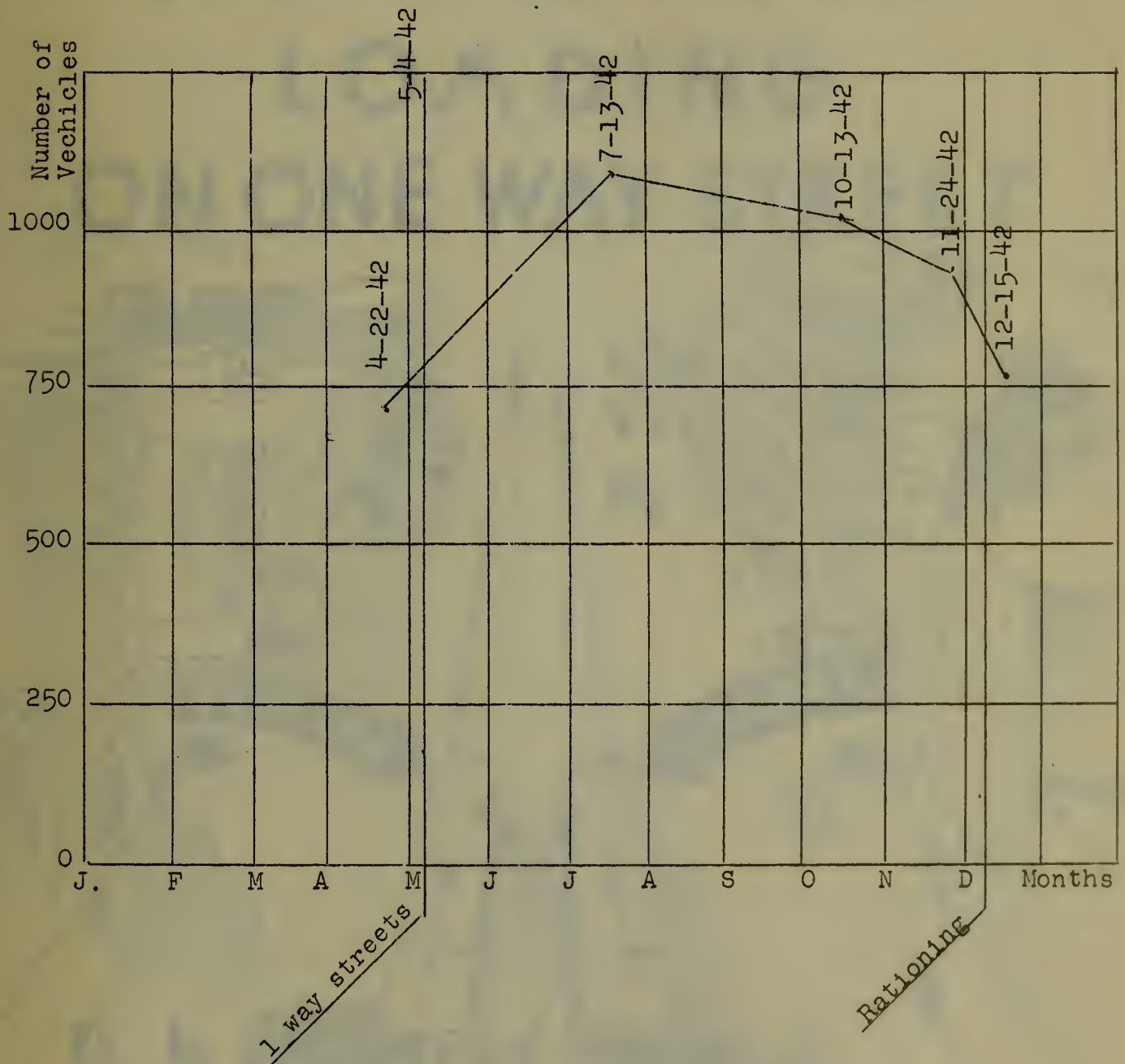
	<u>Count taken</u>	<u>Vehicles per hour</u>	
Traffic survey at Pine at Van Ness between 4:30 and 5:30 P.M.	4.22.42	725	
	-----	-----	5.4.42 - 1 way street
	7.13.42	1200	
	10.13.42	1050	
	11.24.42	900	
All 1942 figures by courtesy of City Planning Comm.	-----	-----	12.8.42 - gas rationing
	12.15.42	800	
	4.24.44	850	

We have also enquired of various stores on one way streets (Safeway, Standard Oil, and several independent stores) as to what effect one way streets had on their trade. Two thirds found no difference in their annual business.

Those affected were service stations located on the lefthand sides of the streets, and places like Dragon's and Stemple's on inbound streets, who used to pick up business from people driving home in the evening.

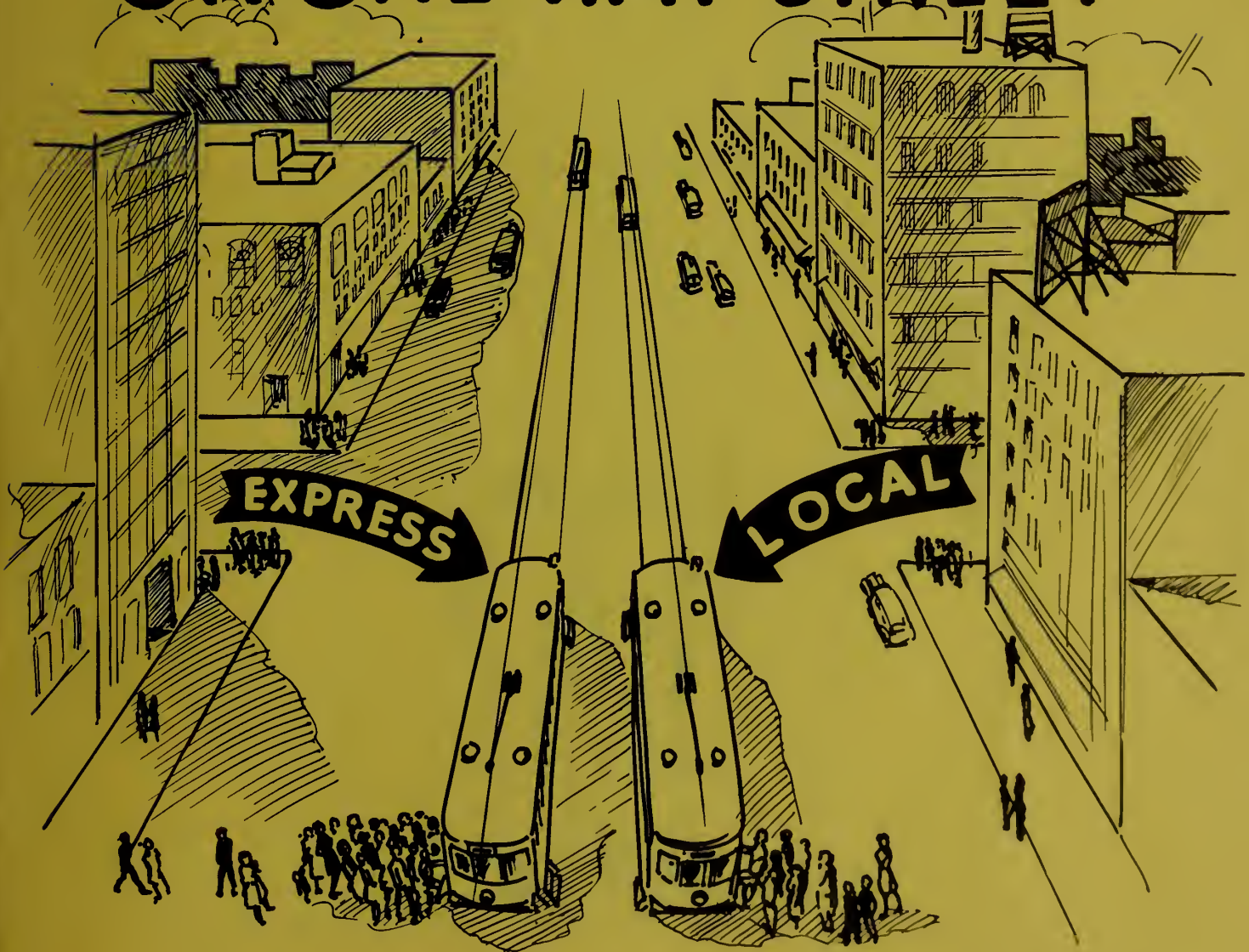
The other 2/3, unaffected, are made up of stores like the Safeway groceries, who serve a neighborhood business, mostly pedestrian, and of specialty shops of all sorts.

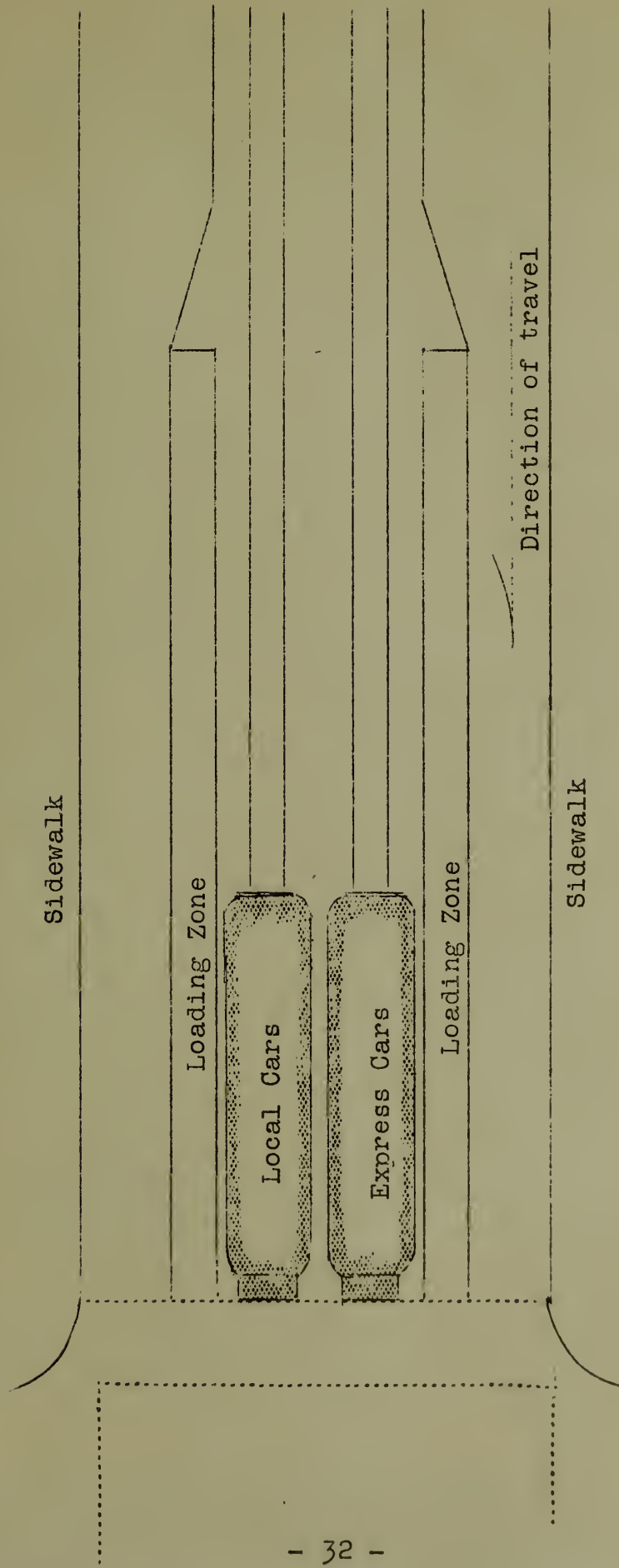
All plotted points are 1942 figures taken at Pine Street at Van Ness Avenue between 4:30 and 5:30 p.m.



These statistics were furnished through the courtesy of the City Planning Commission. They are based on figure taken in 1942, and show the effects on automobile traffic of one way streets and gasoline rationing.

LOOP SYSTEM LOADING ON ONE WAY STREET





LOOP SYSTEM
Typical Loading Operation
when local and express cars
stop at same point

